Jan. 23, 1968 M. J. BAUCOM 3,365,153

NURSING BOTTLE HOLDER

Filed March 23, 1966

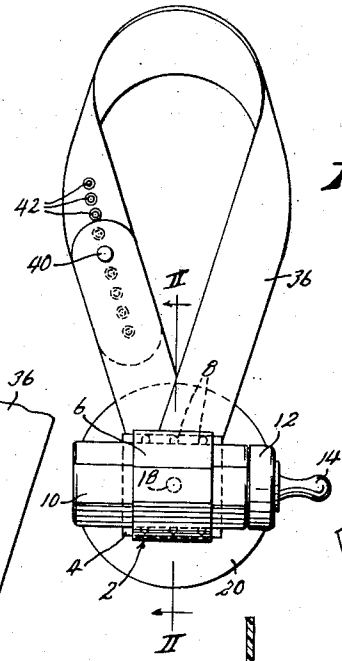


Fig. 1

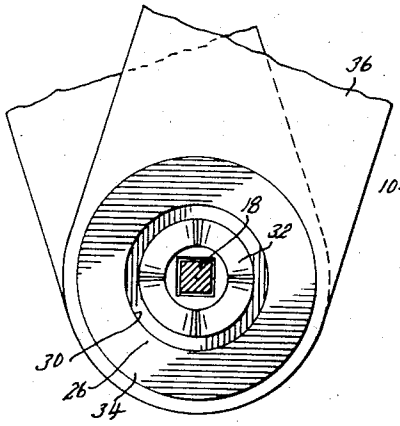


Fig. 3

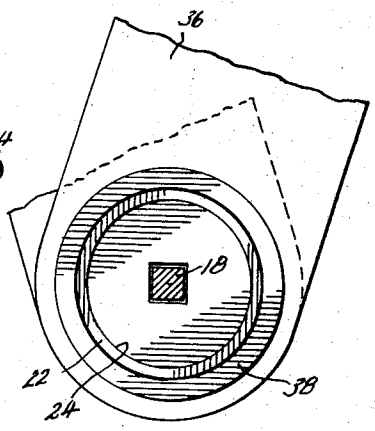


Fig. 4

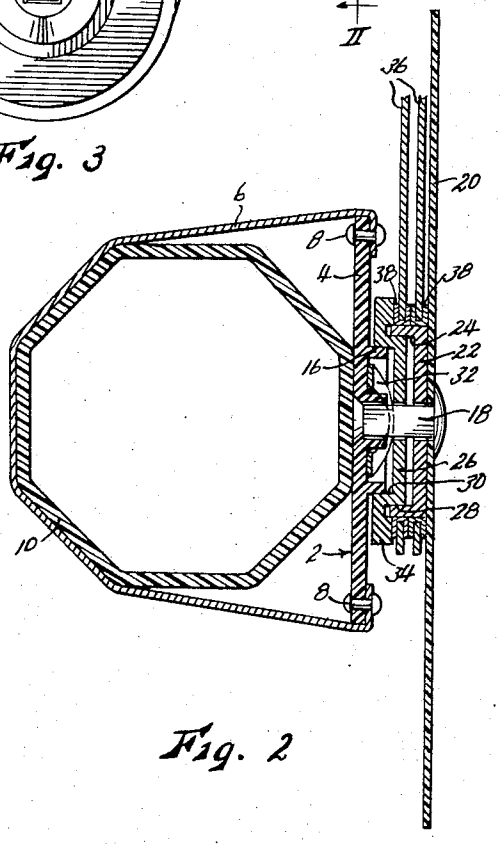


Fig. 2

INVENTOR.
Myra J. Baucom
BY John A. Hamilton
Attorney.

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NURSING BOTTLE HOLDER

Myra J. Baucom, 1056 Haskell,
Kansas City, Kans. 66104

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ABSTRACT OF THE DISCLOSURE

A nursing bottle holder comprising a pliable neck band adapted to be placed about a mother's neck with the ends thereof pivotally and frictionally connected to a bottle mount at the mother's chest, said bottle mount be pivotal with frictional resistance about an axis normal to the mother's chest, and being adapted to hold a nursing bottle spaced outwardly from the mother's chest and with its axis generally at right angles to the pivotal axis of the bottle mount.

This invention relates to new and useful improvements in baby feeding equipment, and has particular reference to a device for holding a nursing bottle as the infant is being fed.

The principal object of the present invention is the provision of a holder for a nursing bottle including a supporting neck band adapted to be engaged about the neck of the mother and operable to support the bottle adjacent her chest in a position conveniently accessible to a baby held in one of the mother's arms. This leaves the other arm free for other purposes, rather than for holding the bottle, thereby substantially increasing the case and convenience of the feeding operation.

Another object is the provision of a nursing bottle holder of the character described having means for adjusting the position of the bottle suspended thereby to the preference and convenience of each user. Included are means for adjusting the elevation of the bottle with respect to the mother's chest, for adjusting the angle of inclination of the longitudianl axis of the bottle, and for adjusting the distance to which the nipple of the bottle projects to either side.

Other objects are simplicity and economy of construction, efficiency and dependability of operation, and ease and convenience of usage.

With these objects in view, as well as other objects which will appear in the course of the specification, reference will be had to the accompanying drawing, wherein:

FIG. 1 is a front elevational view of a nursing bottle holder embodying the present invention, shown in its position of use, and having a nursing bottle mounted operatively therein,

FIG. 2 is an enlarged, fragmentary sectional view taken on line II—II of FIG. 1,

FIG. 3 is a front elevational view of the parts as shown in FIG. 2, but with the bottle and bottle mount removed, and

FIG. 4 is a view similar to FIG. 3, but with the friction disc also removed.

Like reference numerals apply to similar parts throughout the several views, and the numeral **2** applies generally to a bottle mount including a flat, rectangular board **4** of rigid, light-weight material such as plastic, and a strap **6** of elastic the opposite ends of which are secured respectively to a pair of opposite edges of said board, as by rivets **8**. A nursing bottle **10** of ordinary configuration is adapted to be inserted between board **4** and strap **6**, and to be held firmly but yieldably against said board by the resilience of said strap, with the longitudinal axis of the bottle parallel to the forward face of said board. Said bottle is provided at one end with a removable cap **12** and the usual nursing nipple **14**, as is well understood in the art. Board **4**, centrally of its rearward face, is provided with an integral, rearwardly extending tubular boss **16** of circular configuration, the axis of said boss being at right angles to board **4**.

A square rivet **18** is fixed non-rotatably at its forward end in board **4**, and extends rearwardly through boss **16**, coaxially therein, and is fixed non-rotatably at its rearward end centrally in a stabilizer plate **20** formed of a flat, circular sheet of light-weight material such as a reasonably rigid plastic. Said stabilizer plate is adapted to rest against the mother's chest to stabilize the bottle as will be described. A diameter of about six inches has been found to be satisfactory for said plate. Mounted coaxially on rivet **18** against the forward surface of the stabilizer plate is a circular hub **22** having the form of a forwardly opening cup, there being a cylindrical recess **24** formed in the forward face thereof, coaxially of rivet **18**.

Mounted slidably but non-rotatably on rivet **18**, intermediate hub **22** and board **4**, is a friction disc **26**. At its rearward face, said friction disc is provided with a projecting boss **28** which is engaged for axial sliding movement in recess **24** of hub **22**, and at its forward face said friction disc is provided with a recess **30** in which boss **16** is engaged for axial sliding movement. A spring washer **32** encircles rivet **18** between board **4** and friction disc **26**, and is operable to urge said members resiliently away from each other. Friction disc **26** is also provided with a peripheral flange **34** which is of greater diameter than hub **22**, extending outwardly therefrom in all directions, and which is spaced forwardly from plate **20**. Board **4**, friction disc **26**, hub **22** and stabilizer plate **20** are all preferably secured against rotation relative to each other by virtue of having square holes formed therein for receiving square rivet **18**.

The bottle mount thus far described is supported by a neck band **36** adapted to pass around the mother's neck, whereby the mount is suspended at her chest, the parts then having the position shown in FIG. 1, as viewed from the front. Said neck band may be formed of a flat strap of heavy cloth or other pliable material. Each end of said band has a circular hole formed therethrough which is bound with a circular metal binder **38** securely affixed to the band. Both of binders **38** are rotatably mounted on hub **22** of the bottle mount, as best shown in FIGS. 2 and 4. Said binders are thus disposed between stabilizer plate **20** and flange **34** of friction disc **26**, and are thereby resiliently pressed together by the action of spring washer **32**. This provides a frictional resistance to rotation of the two binders **38** relative to each other, and also to rotation of the bottle mount about rivet **18** as an axis. Neck band **36** is also divided at a point spaced apart from hub **22**, the resulting end portions being joined adjustably together by a snap fastener consisting of a socket member **40** secured in one end portion of the band, and a series of cooperating stud members **42** secured in the other end portion of the band in longitudinally spaced apart relation. Socket **40** may be joined selectively with any one of studs **42**.

In use, the mother simply engages neck band **36** around her neck so that the bottle mount is suspended at her chest, in the position shown in FIG. 1. The bottle nipple **14** will then be conveniently accessible to a baby held in her arms.

There are several adjustments which can be made to adjust the device to the convenience, comfort, or preference of both the mother and the baby. The vertical elevation at which the bottle is supported adjacent the mother's chest may be changed by engaging snap fastener socket **40** with any desired stud **42**. Any such change will tend to change the angularity of the ends of the neck band at hub **22**, and this change of angularity is of course re-

sisted by the frictional load imposed on binders **38**. However, once the length of the neck band has been adjusted as desired, a downward pull on the bottle mount will force binders **38** to turn on hub **22**, so that the neck band will lie flat and smooth. Moreover, the frictional resistance to rotation of binders **38** relative to each other, coupled with the use of a broad neck band, has been found to provide the useful function of resisting to a quite marked degree any side-to-side swinging or swaying of the bottle as the mother moves, thereby allowing the mother a greater freedom of movement. A neck band at least about two inches wide has been found adequate for this purpose. If said neck band were very narrow so as to be non-resistant to flexure in its own plane, or if its ends were freely pivoted on hub **22**, there would be substantially no resistance to lateral swinging of the bottle.

The broad, flat contact of stabilizer plate **20** with the mother's chest tends to hold the mount firmly with rivet **18** projecting normally to the chest, preventing the weight of the bottle from pulling the forward end of the rivet downwardly to a more nearly vertical position. Thus the bottle is at all times positioned forwardly from the mother's chest so that the nipple cannot be contaminated by contact with her clothing, and is maintained uniformly at the desired elevation.

The angle of inclination of the axis of bottle **10** can be adjusted to the position of the baby, and according to the degree to which the bottle may be filled at any given moment, by gripping mount board **4**, or the bottle itself, and turning it about the axis of rivet **18**, this movement being yieldably resisted by the frictional connection between the mount structure and binders **38** at the ends of the neck band. Overcoming this friction requires a greater force than is required to support the mount and bottle against rotation, so that once the bottle is set at the desired inclination, the frictional connection will maintain it in that position. Also, this rotating adjustment should preferably be performed while at the same time maintaining a downward pressure on the mount to tension the neck band, in order that the relative angularity of the ends of the band engaging hub **22** will not be changed.

Finally, it will be seen that by sliding bottle **10** longitudinally between board **4** and elastic strap **6**, the distance to which the bottle nipple **14** extends to either side of the vertical midline of the mother's chest may be adjusted. This is important in accommodating the device to the position in which the mother habitually or most comfortably holds the baby in her arms.

While I have shown and described a specific embodiment of my invention, it will be readily apparent that many minor changes of structure and operation could be made without departing from the spirit of the invention as defined by the scope of the appended claims.

What I claim as new and desire to protect by Letters Patent is:

1. A nursing bottle holder comprising:

(a) a neck band adapted to encircle the user's neck and comprising a broad, flat strap of pliable material which is adjustable in length, and the end portions of which are disposed in planar overlapping relation,

(b) a bottle mount adapted to support an elongated nursing bottle having a nipple at one end thereof, and comprising a rigid planar board, an elastic strap having its opposite ends secured respectively to opposite edges of said board, whereby a nursing bottle may be inserted and resiliently gripped between said board and said strap with the bottle axis parallel to said board, and a broad, flat stabilizer plate parallel to but spaced apart from said mount board at the side thereof opposite from said strap, and

(c) means attaching said bottle mount to said neck band whereby the former is supported adjacent the user's chest in such a position that the longitudinal axis of said bottle is disposed generally parallel to the wearer's chest, said attaching means comprising a pivot pin at right angles to and interconnecting said mount board and said stabilizer plate whereby to prevent relative rotation thereof, a hub member mounted coaxially on said pivot pin adjacent said stabilizer plate, the overlapping end portions of said neck band being rotatably mounted on said hub with the planes of said band ends at right angles to said pivot pin, and resilient loading means carried by said pivot pin and pressing said overlapping neck band ends against said stabilizer plate, whereby to resist frictionally any rotation of said neck band ends relative to each other or to said stabilizer plate.

2. A nursing bottle holder as recited in claim **1** wherein said friction loading means comprises a friction disc mounted coaxially on said pivot pin intermediate said hub and said mount board, said friction disc being axially slidable on said pivot pin but secured against rotation thereon, and having a peripheral flange cooperating with said stabilizer plate to grip said overlapping end portions of said neck band therebetween, and a compression spring member interposed between said friction disc and said mount board.

References Cited

UNITED STATES PATENTS

2,661,177	12/1953	Hofer	248—291 X
2,673,059	3/1954	Lustig	248—291 X
2,907,539	10/1959	Vardan	248—104
2,938,693	5/1960	Vardan	248—104
3,065,944	11/1962	Liebendorfer	248—102

JOHN PETO, *Primary Examiner.*

R. P. SEITTER, *Assistant Examiner.*